



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,823	11/26/2003	Norio Kainuma	2309.68752	9364
7590	06/23/2006			
			EXAMINER	
			WHITTINGTON, KENNETH	
			ART UNIT	PAPER NUMBER
			2862	
DATE MAILED: 06/23/2006				

Patrick G. Burns, Esq.
GREER, BURNS & CRAIN, LTD.
Suite 2500
300 South Wacker Dr.
Chicago, IL 60606

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/722,823	KAINUMA ET AL.	
	Examiner	Art Unit	
	Kenneth J. Whittington	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 May 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 8-16 is/are allowed.
- 6) Claim(s) 1-4 and 6 is/are rejected.
- 7) Claim(s) 5 and 7 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 26 November 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

Art Unit: 2862

DETAILED ACTION

The Amendment and remarks therewith filed May 15, 2006 have been entered and considered. In view thereof, the rejections of the claims applying Jurgenson et al. (US2004/0231139) have been withdrawn.

6 .

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

12 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Hunsaker et al. (US 5,578,406), hereinafter Hunsaker. Regarding claim 1, Hunsaker discloses a magnetic head tester wherein a medium is rotated to float a slider from the medium (See Hunsaker, Abstract) comprising:

a holder removably holding the slider opposed to the surface of the medium (See FIG. 3, holder 14, slider 10 and medium 55); and

24 suspension means provided on the holder (See FIG. 2, note leaf spring and bump portions of holder), which has the same

Art Unit: 2862

function as a suspension supporting the slider in a real apparatus (Note suspension means and holder position the slider for measurement of signals from the medium, which is the same function as similar components in disk drives).

Regarding claim 2, Hunsaker discloses a holder base
6 inclinably holding said holder with respect to the surface of
the medium (See FIG. 3, item 64); and

means for always biasing said holder towards said medium
(See FIG. 3, note angle of inclination of the holder and holder
base which when the medium and slider are moved into contact
with each other, the combination of the components biases the
12 holder and hence the slider toward the medium).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which
forms the basis for all obviousness rejections set forth in this
Office action:

18 (a) A patent may not be obtained though the invention is not identically
disclosed or described as set forth in section 102 of this title, if the
differences between the subject matter sought to be patented and the prior
art are such that the subject matter as a whole would have been obvious at
the time the invention was made to a person having ordinary skill in the
art to which said subject matter pertains. Patentability shall not be
24 negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for

Art Unit: 2862

establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunsaker in view of Boutaghous (US 6,359,758). Regarding claims 2 and 3, Hunsaker teaches the features with respect to claim 1 as noted above. However, Hunsaker does not teach a holder base, holder and pin arrangement.

Boutaghous teaches an alternative design to the simple bump suspension design of Hunsaker, and teaches a suspension arm of a disk apparatus comprising a holder for holding the slider (See Boutaghous FIG. 3, holder 22 holding slider 24); a holder base inclinably holding said holder with respect to the surface of the medium (See FIG. 3, holder base item 18); said holder is inclinably supported with respect to the holder base via a supporting pin (See FIG. 3, item 31) which supports and contacts a load center of said holder (See FIG. 3), and said biasing means provides bias to said supporting pin to bias the holder towards the medium (note angle of inclination of

Art Unit: 2862

the holder and holder base which when the medium and slider are moved into contact with each other, the combination of the components biases the holder base and pin and hence the slider toward the medium as shown in FIG. 1 and as is well known in the art).

6 It would have been obvious at the time the invention was made to incorporate the suspension arm assembly of Boutaghout comprising a holder base, holder and pin into the head testing assembly of Hunsaker to arrive at the invention as claimed in claims 2 and 3. One having ordinary skill in the art would have been motivated to do so to finely position a slider with respect
12 to a desired portion of the medium (See Boutaghout col. 1, line 66 to col. 2, line 20).

Regarding claims 4 and 6, the noted combination teaches an elastic member, operating as a cushion, being positioned between the holder and holder base to limit but allow inclination of the holder (See Boutaghout FIG. 3, item 40).

18

Allowable Subject Matter

Claims 8-16 are allowed.

The following is an examiner's statement of reasons for allowance:

Art Unit: 2862

Claims 8-10 are allowed for those reasons contained in the previous office actions.

Regarding claims 11-16, the prior art does not teach the holder base partially surrounding the holder with a supporting pin there-between for inclinable support, in combination with
6 the other features of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

12 Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: regarding these claims, the prior
18 art does not show a coil spring (claim 5) or a leaf spring (claim 7) usable as an elastic member between the holder and the holder base, in combination with the other features of the claims.

Art Unit: 2862

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US2003/0002198 and US 6,212,045 teach varying designs for head/disk testers. US6,965,500, US5,657,187, US5,790,347 and US5,166,847 teach varying designs for suspension arms in disk drive apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Whittington whose telephone number is (571) 272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-12 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2862

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

6 Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199

12 (IN USA OR CANADA) or 571-272-1000.



Kenneth J. Whittington
Examiner
Art Unit 2862

kjw



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800